

arisen later in evolution, and in embryogenesis arises primarily by the migration of nervous elements from the cerebro-spinal system. These migrations of cells take place along the spinal nerves and the vagi. He looks upon the cells that migrate from the cerebro-spinal ganglia and from the neural tube as being homologous with those that give rise to the neuroglia and to the neurones of the central nervous system.

REGENERATION AND CELL DIVISION

Calkins (Jour. Exp. Zool., February, 1911,) gives an interesting account of regeneration in a large protozoan, *Uronychia*, especially as related to its normal cell divisions. It divides once in about thirty-six hours. He concludes that there is little or no power of regeneration immediately after division before the nucleus returns to its normal resting distribution. Even after six to twenty-four hours have elapsed the power of regeneration is limited, parts regenerating only when the micro-nucleus and a part of the macro-nucleus are both present.

On the contrary, during the whole dividing period the regenerative power is high. At this time both segments may regenerate, even without the micro-nucleus, tho the relation of the plane of the section to the plane of the oncoming division has some determinative effect upon the result. The cutting operation retards the cell-division, but the division continues in the original plane.

RED BLOOD CELLS

Roscoe W. King (Jour. Med. Research, January, 1911,) believes that he has conclusive evidence in support of the view that red blood cells of the circulating blood are derived from the erythroblasts of the capillaries of the red marrow by a process of intracellular nuclear degeneration. He has been able to demonstrate the remains of nuclear matter quite generally in the blood cells of normal blood. He also believes that blood platelets are extruded fragments of erythrocytic nuclei.